

ABSTRACT

An information-processing apparatus shown in FIG. 4 is a wireless communication apparatus for communicating prescribed data in wireless with a back-scattering communication scheme, in which a tag (10) for receiving a carrier wave signal S_f having a frequency of 2.45 GHz and transmitting response signal S_f (D) obtained by modulating the carrier wave signal S_f based on the data and a tag reader (20) for transmitting a carrier wave signal to the tag (10) and receiving and signal-processing a response composite signal that is returned from the tag (10) are provided. This tag reader (20) has a carrier-wave-compensating circuit (30) that compares a phase of the carrier wave signal in transmitting the carrier wave signal and a phase of the carrier wave signal in receiving the carrier wave signal and eliminates a carrier wave composite signal that is not synchronized with the carrier wave signal in transmitting the carrier wave signal based on a comparison result thereof.